

IN THE CLAIMS:

Please cancel Claims 11 and 13 and amend the claims as shown below. The claims, as currently pending in the application, read as follows:

1. (Currently Amended) A system for counting the number of layers of a multilayer object, comprising:

oscillation means for emitting an electromagnetic wave to strike either the top surface or the bottom surface of a multilayer object;

reception means for receiving electromagnetic waves generated by reflection of the electromagnetic wave at the interfaces of the layers of the multilayer object; and

processing means for counting the number of layers of the multilayer object on the basis of signals of the reflected electromagnetic waves obtained by said reception means,

wherein the electromagnetic wave oscillated by said oscillation means contains a component having a frequency in a range from 30 GHz to 100 THz.

2. (Original) The system according to claim 1, wherein said oscillation means operates as means for oscillating an electromagnetic pulse and said processing means is adapted to count the number of electromagnetic pulses received by said reception means and operates as means for counting the number of layers of the multilayer object on the basis of the counted number of electromagnetic pulses.

3. (Currently Amended) The system according to claim 1, wherein said oscillation means operates ~~operates~~ as means for oscillating a continuous electromagnetic wave and said processing means is adapted to detect a phase shift received by said reception means and operates as means for counting the number of layers of the multilayer object on the basis of the detected phase shift.

4. (Original) The system according to claim 1, further comprising:  
a second reception means for receiving an electromagnetic wave generated by transmission of the electromagnetic wave through the multilayer object and a second processing means for detecting a phase shift of the transmitted wave relative to the electromagnetic wave before striking the multilayer object and counting the number of layers of the multilayer object on the basis of the detected phase shift.

5. (Original) The system according to claim 4, characterized in that said oscillation means operates-as means for oscillating an electromagnetic pulse, and said second reception means has processing means for detecting a delay time of the transmitted wave relative to the electromagnetic wave that is detected when the multilayer object does not exist and counting the number of layers of the multilayer object on the basis of the detected delay time.

6. (Currently Amended) A system for counting the number of layers of a multilayer object, comprising:

oscillation means for emitting an electromagnetic wave to strike either the top surface or the bottom surface of a multilayer object;

reception means for receiving an electromagnetic wave generated by transmission of the electromagnetic wave through the layers of the multilayer object; and

processing means for detecting a phase shift of the transmitted wave relative to the electromagnetic wave before striking the electromagnetic object and counting the number of layers of the multilayer object on the basis of the phase shift,

wherein the electromagnetic wave oscillated by said oscillation means contains a component having a frequency in a range from 30 GHz to 100 THz.

7. (Original) The system according to claim 6, wherein said oscillation means operates as means for oscillating an electromagnetic pulse, and said reception means has processing means for detecting a delay time of the transmitted wave relative to an electromagnetic wave that is detected when the multilayer object does not exist and counting the number of layers of the multilayer object on the basis of the detected delay time.

8. (Original) The system according to claim 4 or 6, further comprising:

dividing means for dividing the electromagnetic wave emitted from said oscillation means into a first electromagnetic wave for striking the multilayer object and a second electromagnetic wave to be propagated directly to said reception means or said second reception means.

9. (Currently Amended) The system according to claim 1, further comprising:  
propagation means for propagating the electromagnetic wave emitted from said  
oscillation means through a propagation route ~~getting~~ to said reception means.

10. (Original) The system according to claim 4, comprising:  
at least one or more than one oscillation means, one or more than one reception  
means, one or more than one second reception means, one or more than one processing means  
and one or more than one propagation means so as to count the number of layers at a plurality of  
positions at least at the side of the top surface or the bottom surface of the multilayer object.

11. (Cancelled).

12. (Currently Amended) A method for counting the number of layers of a  
multilayer object, comprising:

an oscillation step of emitting an electromagnetic wave to strike either the top  
surface or the bottom surface of a multilayer object;

a reception step of receiving electromagnetic waves generated by reflection of the  
electromagnetic wave at the interfaces of the layers of the multilayer object; and

a processing step of counting the number of layers of the multilayer object on the  
basis of signals of the reflected electromagnetic waves obtained by said reception step,

wherein the electromagnetic wave oscillated in said oscillation step contains a  
component having a frequency in a range from 30 GHz to 100 THz.

13. (Cancelled).